Final Notes July 1, 1999

IMPLEMENTATION TEAM MEETING NOTES

June 3, 1999, 9:00 a.m.-4 p.m.

NATIONAL MARINE FISHERIES SERVICE OFFICES PORTLAND, OREGON

I. Greetings, Introductions and Review of the Agenda.

The June 3, 1999 meeting of the Implementation Team, held at the National Marine Fisheries Service's offices in Portland, Oregon, was chaired by Brian Brown of NMFS and facilitated by Donna Silverberg. The agenda for the June 3 meeting and a list of attendees are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced in the body of the text may be too lengthy to attach; all enclosures referenced are available upon request from NMFS's Kathy Ceballos at 503/230-5420 or via email at kathy.ceballos@noaa.gov.

Brown and Silverberg welcomed everyone to the meeting, led a round of introductions and a review of the agenda.

II. Updates.

A. In-Season Management. Cindy Henriksen, TMT chair, reported that the large 1999 snowpack has finally started to melt. May was relatively cold, with low streamflows, she said; we shifted to a flood control mode late last week as the freshet began. Flows at Lower Granite and Priest Rapids are currently about 170 Kcfs; McNary flows are currently in the 350 Kcfs range.

The headwater projects -- Grand Coulee, Libby, Hungry Horse, Dworshak and Brownlee – are refilling, Henriksen continued. The 1999 sturgeon pulse from Libby has not yet been requested by the Fish and Wildlife Service; the water temperature at Bonners Ferry is still too cold. Once Kootenai River water temperatures reach 10 degrees C., the pulsing operation and incubation flows will begin. Grand Coulee is filling at a rate of 2 feet per day; without storage, the natural unregulated flow last week at The Dalles would have been nearly 590 Kcfs, far in excess of initial control flow. Grand Coulee is expected to refill to elevation 1290 feet by the end of June; Hungry Horse is also expected to refill. In terms of the expectation of meeting the seasonal flow

objectives, the spring target should be met; as for the summer targets, we do not yet have an August forecast, so we don't know whether or not the summer targets will be met at this time, Henriksen said.

Moving on to the 1999 Water Management Plan, Henriksen noted that this document is available via the TMT's Internet homepage; she spent a few minutes going through the changes to this year's Plan, observing that this year's plan has been streamlined for a technical, rather than a general public or policymaker, audience. She noted that TMT has accepted this version of the 1999 Water Management Plan as final, and is now seeking IT approval.

Moving on to 1999 reservoir refill, Henriksen noted that the current TMT spreadsheet shows Dworshak reaching its highest elevation, 1593 feet, on July 10 when flow augmentation may begin. Even if minimum outflow (1.3 Kcfs) is maintained until the start of the summer flow augmentation period, the project is not expected to refill in 1999, based on current SSARR projections. With this scenario, the August 31 elevation at Dworshak would be 1528.86 feet, Henriksen noted.

In response to a question from Brown, Henriksen noted that the mid-July ramp-up of Dworshak outflow is spread over a couple of days in order to keep the flow at Lower Granite above 54 Kcfs longer – it's a gradual ramp-up to match the decline in natural flows.

If Dworshak is at elevation 1529 on August 31, would there be an opportunity to use some or all of that nine feet of storage above the usual end-of-August elevation for temperature control in September? Jim Ruff asked. Yes, Henriksen replied. And that elevation would result from the fact that you're constrained to 14 Kcfs outflow from Dworshak after August 1? Jim Nielsen asked. That's correct, said Henriksen.

The Corps has also modeled an alternative operation, designed to reach an elevation of 1520 feet at Dworshak on August 31, she continued. Under this scenario, Dworshak outflow would be ramped up sooner; maximum project elevation would be only 1590 feet on about July 10. Either scenario is a possibility, she said.

Does the IT need to make a decision about which scenario is preferable at today's meeting? Silverberg asked. I wasn't sure how the IT wanted to go about digesting this information, Henriksen replied; generally, because of the weather we have been dealt this year, spring flows have been low, the runoff is late, and refill is occurring later than normal. In response to a question from Brown, Henriksen said the TMT has not yet developed a recommendation on the preferred summer Dworshak operation; they will be working through this issue next week.

In response to a question from Jim Ruff, Henriksen said the additional nine feet of storage in Dworshak is the equivalent of about 80 KAF. The group spent a few minutes discussing various facets of this issue; it was reported that there is as yet no information available on fish growth or anticipated migration timing. Jim Nielsen noted that last year, IT discussion of this issue included consideration of the Nez Perce Tribe's Clearwater fall chinook growth monitoring information; the Dworshak releases were delayed until those fish reached a size at which they were likely to outmigrate. Jim Yost said Idaho will probably recommend that the Dworshak releases be delayed until water temperatures warm and fish growth has progressed to the point that the releases will do them some good, even if Lower Granite flow sags to 35 Kcfs-40 Kcfs –

it doesn't make sense to artificially keep the flows up with cold water if it's going to retard the growth of those fish, from Idaho's perspective.

Will the Nez Perce monitoring/fork length information be available in 1999? Jim Litchfield asked. We haven't talked about that yet, Nielsen replied – we'll discuss it at next week's FPAC meeting. Is that Idaho's proposal, that we take that information into account in deciding when to begin augmentation from Dworshak in 1999? Litchfield asked. Yes, Yost replied. Nigro cautioned that fall chinook outmigration timing isn't solely a function of when the cool water releases from Dworshak occur; there is evidence from other, non-augmented tributaries that the fall chinook life-history includes a range of outmigration timing.

The Fish and Wildlife Service is also monitoring fall chinook development in the Hells Canyon reach, said Nielsen; ODFW is also monitoring fish development and migration timing in some of the tributaries, so we will have multiple sources of information. Chris Ross added that USFWS is developing a predictive tool for fish development as well.

In response to a question from Brown, Henriksen said Hungry Horse is in a straight-line refill mode, and is expected to refill by the end of June. At Libby, as I said, we're still working out the sturgeon pulse and incubation flow, and the refill operation for that project; the cool spring weather pushed refill back for that project as well, she added. Do you expect to refill Libby in 1999? Brown asked. We don't know at this point; it will depend on the requested sturgeon and bull trout operations, Henriksen replied. Litchfield noted that this is obviously an important issue in Montana; there may have to be some tradeoffs between species, and releasing water early or late. I don't have enough information to tell you that there will be a problem this year, he said, but I wanted to give you a heads-up that there could be a problem.

Yost observed that the current reservoir refill situation is a result of using storage water to augment flows in the spring, rather than saving the water for use later in the summer; Idaho's migration strategy includes an alternative operational scenario in which we would have had some water available for spring migrants, and still refill Dworshak. We need to work with the TMT and IT on the timing of flood control, so that water is available for both spring and summer migrants, he said.

Is your point, Jim Litchfield, that we are going to be facing a decision about sturgeon flows vs. flows later for bull trout or salmon? Brown asked. The point, I think, is that the timing of the 1999 sturgeon pulse is very late this year; the later it comes, the later refill will occur, if it occurs at all, Henriksen said. The Corps has been modeling various scenarios, but we need some feedback in terms of bull trout and salmon decisionmaking. Who do you need that from? Silverberg asked. In the past, the Corps has worked with the technical staffs of USFWS, Montana and others, to develop a recommendation, then bring it back to TMT for discussion, Henriksen said.

As we get into in-season management, we need to look at the effects of the sturgeon operation on the operations for bull trout and salmon, and not just make this decision on a first come, first served basis, Litchfield added -- there has to be some give and take; personally, I don't know of a magic formula to decide that sturgeon get water, but salmon or bull trout don't.

How would VAR Q have changed the early-season operation at Libby? Brown asked. Since we

weren't authorized to operate to VAR Q, we operated to a traditional flood control operation, based on the monthly runoff forecasts, Henriksen replied. The March 31 flood control refill target at Libby was 2310 feet; April 15 target was 2325 feet. VAR Q would have had us fill to a higher elevation, she said. In response to another question, Doug Arndt said the VAR Q authorization issue is being discussed internally at the Corps; it will be front and center in the BA/BO discussions later this summer.

Where will the issue of how to use the remaining storage in 1999 be resolved? asked Bob Heinith. Typically, at TMT, until it's brought here, Brown replied. Heinith observed that the TMT typically only looks at week-to-week operations; there is a need to take a more comprehensive, long-term look. Brown agreed that this need exists; Nielsen added that FPAC is also discussing the long-term management issue.

Bruce Lovelin observed that, if the project operators are unable to refill Dworshak in a year of 140% runoff, that sends a very negative message to the people who live and recreate around that reservoir. I think that's the point Jim was making, said Brown -- when that project is 155 feet from full in mid-April, that's a long way to recover. Yost agreed, saying that, unfortunately, at this point in the season, with Dworshak on minimum outflow, there isn't anything that can be done to rectify that situation in 1999. It will, however, be something Idaho will be focusing on heavily in future years.

B. Plan for Analyzing and Testing Hypotheses (PATH) – Report on Schedules and Priorities. Dave Marmorek said there was a successful meeting of the PATH/IT planning group on May 26; a memo, on the subject of the prioritization of PATH tasks (attached as Enclosure C) was one of the results of this meeting. Participants in the meeting discussed the relative priority of the seven tasks currently on PATH's plate: more work on fall chinook (Task A), more work on spring/summer chinook (Task B), review of the A-Fish Appendix (Task C), experimental management (Task D), analysis of the effects of John Day drawdown on Mid-Columbia stocks (Task E), analysis of the effects of John Day drawdown on Snake River stocks (Task F), and Alternative A5 (Task G).

Marmorek went through the current status of each of these work products, saying that PATH/IT strongly recommended that PATH focus its efforts on tasks A-D. Even if Tasks E-G are assigned a lower priority, he said, PATH will be hard-pressed to complete all of that work. In terms of the relative priority of Tasks A-D, generally, the fall chinook work was rated as a very high PATH priority, as was the spring/summer chinook work. Basically, what we took away from the meeting was work on all four (A-D), but make sure you get the fall chinook work done, Marmorek said – all four are important, and that is how PATH is proceeding.

In response to a question from Arndt, Marmorek described the details of PATH's analysis of the A-Fish Appendix. The first part of the task is for the PATH members to independently submit their review comments on the A-Fish Appendix; we then need to do some follow-up analyses related to the D parameter, the effects of climate and other issues for spring/summer chinook. The schedule for this effort may be somewhat behind, particularly in the submission of the individual reviews; however, we're not yet behind in terms of our spring/summer chinook sensitivity analyses, Marmorek said.

Basically, the sense from that meeting is that all four tasks – A, B, C and D – are important, and

should be worked on in parallel, Marmorek said. Do you see any problem with getting the John Day drawdown effects analysis done in time to inform the Corps reconnaissance-level report? Heinith asked. It's going to be tight, Marmorek replied. Will you be looking at both spillway crest and natural river drawdown? Heinith asked. That's a good question, said Marmorek; it is likely that we'll only get to natural river drawdown, because if you don't see sufficient benefit from natural river drawdown, there isn't much point in looking at spillway crest. Heinith said the treaty tribes would like to see the spillway crest alternative studied as well, because that will have benefits in terms of the region's ability to go to Congress and request additional studies. I'll take that back to PATH, Marmorek said.

- C. Integrated Scientific Advisory Board (ISAB). No ISAB report was presented at today's meeting.
- D. Water Quality Team (WQT). Mark Schneider reported on recent activities of the WQT; the merger between the Dissolved Gas and Water Temperature Teams is now complete, he said, and the combined group is being co-chaired by myself and Mary Lou Soscia of EPA. The group has also completed and approved its guidelines, modeled on those of other regional forum teams; they are available for the IT's perusal and, I hope, approval, Schneider said.

In response to a question from Silverberg, it was agreed that the IT will approve the WQT guidelines at its July meeting, once the group has a chance to review the document. Schneider asked that any IT comments on the guidelines be submitted to him as soon as possible.

The Team has already dealt with some fairly substantive issues, said Schneider, developing recommendations on the 1999 John Day spill test and the Ice Harbor tailrace TDG monitoring situation. At the end of yesterday's meeting, the team also spent a few minutes describing the future issues they see coming up on the horizon. Jim Ruff said some of the issues identified at yesterday's meeting related to items discussed today, notably expanded Snake River temperature monitoring and the use of Dworshak water to control temperature. Silverberg noted that the WQT has established a working link with the TMT; Ruff added that one very positive aspect of the WQT is the fact that the state water quality agencies and EPA are active participants.

Heinith noted that there is a strong regional desire to have the Corps re-install the Snake River tri-level thermograph instruments as soon as possible, so that some data is available for use this year; that is vital information, he said, and time is moving on. Is that something the WQT has addressed? Arndt asked. We haven't talked about it specifically, but there is no reason why we couldn't, Schneider replied. In the context of what Jim and Mark have just presented, Arndt said, that seems like an issue that the WQT could address fairly quickly.

The question is, where should the recommendation about the implementation of a temperature monitoring program be developed? Ruff asked. The WQT does not control any funding; this issue has, however, been discussed by the SCT. If funding can be identified for Snake River water temperature monitoring, then we could ask the WQT to develop a plan for how that monitoring could be established. Arndt suggested that the WQT be asked to develop a recommendation about whether and why such a network is necessary, not just how it should be done; I'm not sure the SCT has the necessary expertise, he said. If the WQT feels this work is a high priority, we can then ask the SCT to find funding. Perhaps Mark could schedule a WQT conference call to discuss this issue, Silverberg suggested, given the fact that the next WQT

meeting is scheduled for July 10.

The group discussed the feasibility of getting the Snake River water monitoring system in place and operational within the next month or so; Heinith replied that it should be possible, at a minimum, to reinstall the system that existed last year. So the SCT has considered this issue, and that, while there was a general sense of support for this project, there was some question about the availability of funding? Brown asked. I think there is general support for the project within the region, the scientific community and the SCT, Ruff replied. What I did hear at SCT was a concern about whether or not it is feasible to use CRFM funds for this project. If not, it will be necessary to use O&M funding, which, as everyone knows, is extremely limited.

After some minutes of further discussion, it was agreed that the WQT conference call will take place prior to next Wednesday; the WQT will then discuss this project with the TMT at their upcoming meeting. In the meantime, Arndt will check with others in his agency about the availability of funding. It was further agreed that the IT will meet via conference call to discuss this issue on Thursday, June 10, from 1-2 p.m. We can at least check in on Thursday, and develop a track to a decision, said Brown. In response to a question from Arndt, Schneider said the WQT's recommendation will be presented in the form of a written memo from the WQT cochairs, to be distributed to the IT prior to Thursday's conference call.

Silverberg briefly recapped the next steps on this issue: 1) WQT to review whether to expand the current monitoring system; if yes, define purpose, cost and geographic scope; 2) if necessary, review at TMT; 3) Corps to identify funding source; 4) IT conference call June 10 1-2 p.m.; 5) WQT to look at longer-term system question.

Dan Daley asked that the TMT consider how this data will be used to inform its operational decisionmaking process; the purpose for which the information will be used needs to be explicitly defined. In response to a question from Lovelin, Bill Hevlin observed that there are temperature monitors installed and operating at all four Lower Snake dams. The essence of this issue isn't whether or not temperature monitoring is needed in the Lower Snake, Ruff observed – it's whether or not we need to expand the system that is already in place.

E. System Configuration Team (SCT). Hevlin reported that the SCT has made progress on setting its priorities for the Corps' FY'00 CRFM program; we have a process in motion, establishing state, federal and tribal caucus groups to score the 40+ items in the FY'00 CRFM budget, using the criteria developed by the SCT, he said. The federal caucus has already begun to develop its prioritized lists; the state and tribal caucuses are just getting underway. At the June 21 SCT meeting, the three lists will be brought together into a single combined, preliminary list; we'll use that list as a starting-point for our deliberations as information on the FY'00 funding level comes in from Congress, Hevlin said.

Ruff noted that the ranking process is especially important this year, because, while the Corp's FY'00 CRFM budget request was \$100 million, the Senate has already set its funding level at \$70 million, and the House appropriation is likely to be even lower. Ruff said June 17 is the deadline for the development of each caucus' prioritized list, so that they can be discussed at the June 21 SCT meeting. Heinith said the tribal caucus will not meet that deadline; Arndt encouraged the tribal caucus members to try to stay with the schedule under which the federal and state caucuses are operating. It is a high priority for us, and we'll do our best, Heinith said.

Hevlin said that, if he can provide any assistance in the tribal effort, he will be happy to do so.

In response to a question from Lovelin, Hevlin said there is still a bit of additional discussion remaining on the FY'99 project list; Ruff said there is about \$5 million in available FY'99 funding remaining, and discussion is still ongoing on how to spend it.

Moving on, Hevlin said some problems have been encountered in the 1999 John Day extended-length screen biological testing. You'll recall that there were some parties that wanted the extended-length screen testing to proceed at John Day, while others did not, he said; SCT reached a compromise under which biological testing would be conducted using prototype escreens in 1999 before a final implementation decision is made. It was further agreed that the final implementation decision will also take into account results from the John Day surface collection and spill efficiency evaluations.

The biological testing started May 5, Hevlin said; through May 22, we ran 15 replicates of the test to study fish guidance efficiency -- what percentage of the fish passing through the intake are guided into the gatewell by the extended screen. As we saw in 1996, Hevlin said, fish guidance was high for yearling chinook (82%), steelhead (91%) and sockeye (76%). In terms of orifice passage efficiency (OPE), preliminary results show that 90% of these fish leave the gatewell within 24 hours.

As the test proceeded, personnel at John Day noted an increase of 0.5%-1% in total project mortality, when the e-screens were installed and operating, Hevlin continued. It seemed to be related to the time the e-screens were operating in unit 7. Regular FGE testing was stopped May 21; project personnel released 147 PIT-tagged yearling chinook into the screened gatewell. They captured 137 of those fish within 24 hours; 16 were dead, which was cause for alarm. FFDRWG met May 24 to discuss what to do about this issue, and they developed three recommendations, said Hevlin: first, that the screened unit (Unit 7) should not be operated for power; second, discontinue the OPE test, third, continue the FGE test. During the additional FGE tests, there were no additional signs of mortality.

On May 26, they released 150 fish; within 24 hours, they recovered 128, and 50% of those fish were dead, Hevlin said. After further discussion, the engineers have narrowed the problem down to gatewell hydraulics. There is more flow going into the gatewell at John Day, compared to other projects; the vertical barrier screen system was designed for Lower Granite, not John Day. Impingement on the VBS could be the culprit here, as could excessive gatewell turbulence. The orifice at John Day is also lower than it is at McNary or Lower Granite, which could be contributing to the problem, Hevlin said.

The plan at this point is to delay further testing and development of the John Day e-screens, because of the need to go back and do more hydraulic testing of the John Day gatewell, as well as the VBS design, Hevlin continued. FFDRWG has pretty much decided to postpone the summer test, Hevlin said. Unit loading has also been discussed, said Jim Nielsen; they are planning to reduce Unit 7 loading to 125 megawatts tonight. If little or no mortality is seen, it will pretty much confirm that gatewell hydraulics are the problem, Hevlin said.

The group spent a few minutes discussing the nuances of this situation; in response to a question from Heinith, Hevlin said NMFS' opinion is that, other than the lower-load test, there is no need

for further biological testing in 1999, although FFDRWG is still discussing the further testing issue. The prototype screen will likely be removed and the standard screens put back in, so Unit 7 can be operated if needed. The group discussed the advisability of testing survival through gatewells 7a and 7c, to ensure that the problem has been correctly isolated to 7b; ultimately, Silverberg suggested that this is a level of detail that would most appropriately be explored by FFDRWG. She asked the IT participants to discuss any concerns or suggestions they may have with their FFDRWG representatives.

F. Quantitative Analytical Report (QAR) Update. Hevlin said that, as others will recall, the QAR is a process to develop two information items for listed Upper Columbia and Mid-Columbia species. The first task is to determine the biological requirements of the species for survival and recovery; the second is to analyze the effect of proposed long-term actions on these species. Long-term actions include those proposed by the Mid-Columbia PUDs, as well as those proposed by the federal action agencies at projects upstream and downstream. The guidance or coordination committee of the QAR process has met several times, and will meet next on June 18; this committee includes representatives from the three Mid-Columbia PUDs, NMFS, WDFW, COE, BPA, BOR, CRITFC, FERC and PATH.

At the last meeting, the guidance committee appointed three technical working committees, Hevlin continued: the Biological Criteria committee, focused on the biological requirements of the listed species, the Modeling/Analytical committee, and the Data committee, tasked to organize the existing data related to run reconstruction.

All three of these committees have been meeting, said Hevlin, and a preliminary report is expected from these groups next week, in anticipation of the June 18 meeting. In general, he said, I'm working on two tasks: first, to obtain more representation from the federal action agencies on both the guidance committee and the technical work groups; the other thing we need to work on is the budget requirements of the technical work groups, so that, at the June 18 meeting, we have a good feel for the resources needed to complete this task. In terms of the overall timeline for this effort, we should have some preliminary information -- analysis and reports -- within three months – the August/September period, Hevlin said.

In response to a question, Chris Toole said all three of the QAR technical working groups will be developing scoping documents within the next few weeks, laying out what will be required to accomplish their tasks. In response to a request from Tony Nigro, it was agreed that these scoping documents will be provided for IT review as they become available.

Will there be a jeopardy standard established for these stocks? Heinith asked. The purpose of defining the biological criteria is so that they can be used in the Section 7 consultation, Toole replied. We will deal with the jeopardy standard issue in the Mid-Columbia the same way we did in the Snake River, said Brown -- essentially, it will be a judgement call, with a target set in terms of the number of fish. There probably will not be a numerical target set in terms of the probability of achieving that target number of fish, however, he added.

III. State of Idaho Recommendations for 1999.

Jim Yost led this discussion; he distributed Enclosure E, a document titled "Enhancing Salmon

and Steelhead Migration Success – State of Idaho Recommendations for 1999." Yost said Idaho's recommended measures for the 1999 migration season include the following:

- 1. A more equitable balance between in-river and transported smolts
- 2. An enhancement of in-river conditions for juvenile salmon and steelhead migrating during the springtime
- 3. Control of avian predators that consumed up to 25 percent of outmigrating smolts in 1998
- 4. An aggressive test and review of the minimum-gap runner prototype turbines being installed at Bonneville Dam
- 5. Cool water when needed in the fall to improve adult steelhead and fall chinook migration
- 6. A reduction in harvest rates for fall chinook and steelhead through the U.S. v. Oregon process.

Yost said Idaho's 1999 recommendations are similar to the recommendations the state has submitted in previous years; this year's recommendations include a greater emphasis on the control of avian predation and on Idaho's support for aggressive testing of the minimum-gap runner technology at Bonneville Dam and for reduced harvest of fall chinook and steelhead. He noted that the process used to develop these recommendations was one of the first steps in the development of Idaho's comments on the 1999 decision, and included input from a broad spectrum of environmental and industry groups and state agencies.

Enclosure E includes a number of specific recommendations designed to help project operators optimize in-river conditions, to spread the risk between in-river migration and transportation, to control predators, investigate advanced hydroturbine designs, operate Dworshak Reservoir according to an interim integrated rule curve, make optimum use of Brownlee Reservoir and address 1999 adult migration needs (please see Enclosure E for specific details of Idaho's proposed actions). The document concludes with the following statement:

"The State of Idaho reaffirms its commitment to protect and restore our salmon and steelhead stocks. Idaho will do its part and work in a cooperative effort with other states in the region to develop and implement annual and weekly river operation plans to benefit the fish. Idaho encourages an inclusive approach that will foster local support and help avoid conflicts in recognition that the region will need to work together in good faith to help the fish. The State of Idaho actively seeks the support and participation of all other regional entities in reducing the impacts to all listed species."

In response to a question from Arndt, Yost said this memo was prepared specifically for the Governor, his staff, agency heads and representatives of the State of Idaho in the region; we have provided it to the IT so that there are no surprises down the road as to Idaho's policies or objectives, he explained. Any requested actions will be presented through the appropriate forum – IT, TMT or SCT. So this represents the Governor's position? Arndt asked. That's correct, Yost replied.

Hevlin noted that Idaho's participation in the SCT is extremely important; recently, however, that participation has been lacking. Yost explained that IDFG is currently experiencing fiscal constraints, and said he will do whatever he can to try to accommodate Regional Forum participation. Whatever help you can provide would be appreciated, said Ruff; the upcoming SCT meetings, in which FY'00 project priorities will be established, are particularly critical.

Yost then introduced Karl Dreher, the Director of the Idaho Department of Water Resources. Dreher provided a presentation on various aspects of flow augmentation and water use in Idaho, including IDWR's response to the Roy Koch report on flow augmentation water accounting in the Payette River. Dreher distributed an information packet including IDWR's letter on this subject to Jim Fodrea of USBR, Koch's response to that letter and IDWR's comments on Koch's final report (Enclosure F).

I had thought that the issues raised by IDWR in connection with the Koch report were resolved, until I recently visited the NMFS hydroprograms website and read some of the draft language in the BiOp for USBR operations in the Snake River, Dreher began. I was surprised first at the prominence with which the Koch report was displayed on the NMFS website, he said, given the fact that, at best, the report is ambiguous, and at worst, it is misleading.

That was less of a concern than the fact that, in the opinion of the Department of Water Resources, it is highly inappropriate for a third party to take that ambiguous information and reach their own conclusions, Dreher continued. That is what NMFS and other commentors, such as the Fish Passage Center, have done. Dreher observed that it would have been more appropriate, in his opinion, for Koch to have given IDWR an opportunity to review his draft report before it was submitted to NMFS, which subsequently incorporated his conclusions into the draft BiOp.

Dreher spent a few minutes going through the specific issues IDWR has with the Koch report, which are detailed in Enclosure F. In particular, Dreher said, in his response to IDWR's comments, Professor Koch states that "As the now complete report documents, I evaluated all of the model assumptions I could identify as well as the sensitivity to data errors and found it to be robust for the purposes of accounting for storage water. It is my opinion that the IDWR Accounting Model is the best tool available to NMFS for their purposes and that it is unlikely that anything better could be developed." The problem, said Dreher, is that this conclusion is not reflected in Koch's final report.

Given this fact, Dreher said, it is easy to understand why various parties have used the report to conclude that Idaho is not delivering the storage water, and that Idaho's accounting methods are incomplete and sloppy.

Dreher reviewed the inaccuracies IDWR has found in the Koch report (again, see Enclosure F for details). He explained that his purpose today was to clear up any remaining confusion about the Koch report; if anyone still has questions about how the IDWR Accounting Model works, he said, we're always willing to sit down with those parties and explain things. If you think we're missing something, we're always willing to consider that as well.

The bottom line is that Idaho is providing the water, and it is getting downstream, said Dreher. However, that is not reflected in the draft BiOp, or in the comments from others, such as the Fish Passage Center. He asked that, in the future, if NMFS has problems with the way Idaho flow augmentation water is accounted for, that they communicate their concerns to IDWR before those concerns reach the BiOp language stage.

Dan Daley observed that the suspicions the Koch report has raised are extremely damaging to relations between the states, the federal parties and other entities involved in the salmon recovery

effort. Perhaps we should re-think our priorities, Daley suggested – rather than continually seeking more water, we might be better served to try to find more benign ways to accomplish the goals of the flow augmentation program.

My understanding of what the draft BiOp says is that, because the water is accounted for at Brownlee, there is no issue, with respect to the delivery of the 427 KAF, said Brown. The BiOp does say that, but not as concisely as you just did, Dreher replied – it leaves the impression that there is still a problem, that there is some uncertainty about whether the 427 KAF is actually being delivered, and that, therefore, some additional measures may be needed to verify that delivery – USBR oversight of the delivery process, for example.

Will NMFS be asking for any revisions to the Koch report, in response to IDWR's concerns? Lovelin asked. Probably not at this point, Brown replied – it is a final report from a contract that was issued three years ago. Yost noted that, when the Koch report was submitted to the IT, various parties were critical of Idaho's water accounting methods; the fact is that Idaho does one of the best jobs of measuring water of any state. For years, we've been trying to convince the region that, when we say we're going to deliver the 427 KAF, all of that water is actually delivered at Lewiston, he said. If the region wants to come after Idaho water, that's fine, said Yost – just don't use an inaccurate report as an excuse to do so. The accounting information is on the table, and we have nothing to hide.

Brown noted that Idaho and others have recently submitted comments on the draft BiOp that is now out for review; he added that he was aware of the conclusion, in Koch's response to the Idaho comments, that the IDWR Accounting Model is the best tool available to NMFS, that Idaho does a good job of accounting for its water, and that the 427 KAF is in fact being delivered. If that doesn't come across in the Biological Opinion or on the NMFS web page, said Brown, I'm sure your comments will provide guidance as to how it can be highlighted more prominently. They certainly will, Dreher replied.

Silverberg outlined the actions associated with this issue as follows: IDWR will work with NMFS to ensure that the information on the Koch report on the NMFS web page is accurate, and NMFS will ensure that IDWR's comments on the Koch report are reflected in the draft BiOp now out for review.

IV. Transboundary Gas Group (TGG) Report.

Jim Ruff led this discussion; he briefly described the background of the Transboundary Gas Group, explaining that it began as an informal meeting group at an international conference, "Toward Ecosystem-Based Management in the Upper Columbia River Basin," held in Castlegar, B.C. in April 1998. Previous to that, he said, the Implementation Team had asked the System Configuration Team and the Dissolved Gas Team to look at developing a systemwide approach to dissolved gas management because, up to this point, dissolved gas management has been approached on a dam-by-dam basis. The problem, said Ruff, is that this is not a very cost-effective way to go about abating gas in the Columbia River.

The Corps, as most of you are aware, has its own program to abate gas at the eight mainstem projects in the FCRPS, Ruff continued. The idea behind the TGG is to expand that effort to include all of the projects in the Columbia Basin.

The TGG is unique in that it includes active participation from both U.S. and Canadian federal agencies, as well as U.S. state and Canadian provincial agencies, Indian tribes, utility companies and private industry. The TGG's stated goal is to reduce systemwide total dissolved gas to levels safe for all aquatic life in the most cost-effective manner possible; to do so will require the development of a systemwide dissolved gas management plan, Ruff explained.

The TGG is co-chaired by Bev Raymond of Environment Canada and Mark Schneider of NMFS; it includes a steering committee and four subgroups: Monitoring and Information Sharing, Operational and Structural Abatement, Modeling and Biological Effects and Research.

Ruff explained that the TGG is seeking the IT's endorsement of the following activities:

- 1. The development of a study plan to reduce TDG levels in the Columbia River in a cost-effective manner
- 2. Collection/verification of TDG data at major projects to identify "hot spots" and develop a computer model of TDG generation in the Columbia-Snake system.
- 3. Development of a computer model allowing evaluation of operational and structural gas abatement alternatives
- 4. Formation of a partnership of major hydro project operators to fund an investigation of gas abatement measures.

Ruff said that, when it is completed this fall, the Transboundary Gas Group study plan will answer the following questions:

What work needs to be done? How long will it take? How much will it cost?

He added that the study plan will be presented to decision-makers in Canada and the U.S., with recommended action items and budgets.

Ruff also distributed a TGG fact sheet, which provides further details of the group's purpose, membership, goals and objectives; this document is Enclosure G.

In response to a question, Ruff said funding continues to be a problem for the TGG; so far, no funds have been identified for the development of the study plan, and EPA is the only agency that has made a resource commitment, in the form of one staff person to work on a systemwide dissolved gas model, to the Transboundary Gas Group effort. Brown asked what specific tasks the TGG needs funding for. Ruff replied that these work products are identified in the previously-mentioned list of activities. He noted that Reclamation is considering a number of very expensive alternatives to abate gas at Grand Coulee; much of the problem at that project results from high TDG levels crossing the international boundary from Canada. If we can abate gas at some of the Canadian projects, he said, my belief is that gas abatement at Grand Coulee will be a much less expensive proposition.

Given the fact that this is the first opportunity the IT has had to review this information, Silverberg suggested that the group look it over and come to the next IT meeting prepared to make a recommendation on the activities outlined by Ruff; it was so agreed.

V. 1999 Decision.

A. Federal Caucus Update. Brown explained that the Federal Caucus is basically a venue for the federal agencies to develop issues, ideas and positions preparatory to participating in the Columbia River Basin Forum. There are a series of committees working in various areas, he said; the two principal work products under development at this time are a draft Biological Assessment that will basically be a preferred action, with the requisite assessment of that action, to re-initiate consultation on the FCRPS this October, and a "4-H" paper, looking at the hatchery, harvest, habitat and hydro components, to put the hydro decisions that will be encompassed in that BA into some sort of context.

Within the proposed action and Biological Assessment, there will be a number of issues, Brown said – the dam removal question, of course, is the one most people have been focusing on as the Columbia River Basin Forum and Multispecies Framework processes have gotten underway. What we've realized within the Federal Caucus is the fact that, at the start of the 2000 migration season, no matter what is decided, the dams will still be in place, he said. In other words, there is an operational piece of the reinitiation that needs to be developed, to get at things like flow augmentation and various other measures – do they continue, or do they change in some way?

One other item, said Brown – the intent of these two Federal Caucus work products is to bring information into the Framework group. There has been some concern among the other Framework participants about the approach the federal parties are taking; it is our intent to be in a position to make a decision at the end of 1999, but it is not our intent to start some separate initiative, Brown said. Whether or not the 1999 decision produces a regional consensus, there is still going to be a proposed federal action.

Both the draft Biological Assessment and the "4-H" paper are due out in October, Brown continued, as are the Framework draft, the Corps' Snake River EIS and the Corps' John Day study -- in other words, come this October, there will be a huge convergence of information and actions that will need to be discussed in the public forum, and that is the basis for this agenda item, said Brown.

In response to a question, Brown said that, with the release of all of these documents in October, NMFS' expectation is that it will be necessary to reinitiate consultation, a process that will be concluded by March 2000.

B. Multi-Species Framework Update. John Palensky updated the IT on the status of the Framework process, in particular, on the current state of the alternatives that are being developed under this process. His presentation is captured in a series of overheads (Enclosure H), please see this document for details of Palensky's presentation.

Essentially, said Palensky, the development of the Framework alternatives is still on schedule; they are being refined, and the Human Effects and Ecological Work Groups have begun their analyses of the alternatives, using the Ecosystem Diagnostic Treatment (EDT) approach. As Brian mentioned, the Framework analyses will be one of the pieces of information that will be made available in October, Palensky said.

What are the chances, in your opinion, that the Framework process will produce an end-product that will be truly useful in the regional debate on the 1999 decision? asked Lovelin. All I can tell

you is, the Framework process is designed to do just that; NMFS is supportive of this process, and the intent of the process is to produce a meaningful analysis of each of the alternative visions for the future of the Columbia River system, Palensky replied. Where that information lands and how it is ultimately used, of course, is anybody's guess.

Brown added that, as the Federal Caucus develops its preferred alternative, it will be feeding that into the Framework process; we're also hoping that the Framework process will do something with that before we have to come out with a preferred alternative, he said – our hope is that the Framework process will incorporate the specifics of that preferred alternative into a proposed action.

C. Update on Framework – IRC Work Group. Jim Ruff explained that there is an effort underway under the Framework analytical umbrella to identify how well the Integrated Rule Curve concept fits into the Framework alternatives, and into which alternatives. As most of you are aware, he said, the IRCs are intended to protect resident fish in the headwater storage projects used in flow augmentation; the idea is to see whether we can provide resident fish protection and still provide salmon flow augmentation.

With this in mind, a Framework IRC work group has been formed, of which I am apparently the coordinator, Ruff continued. The group has met once in person and once by conference call; another conference call is scheduled for tomorrow morning. Again, the goal is to identify the strategies into which the IRCs do and do not appear to fit. Basically, we're in the process of deciding what we're going to do, how we're going to do it and what tools we're going to use, as well as who is going to do the work, Ruff explained.

In terms of how this effort fits in with the Federal Caucus, said Ruff, the Federal Caucus includes a hydro work group, which has requested that the Framework participants become more involved in their efforts. They are also participating in the Framework IRC work group, so in general, there is an effort to integrate the analysis of alternatives from the hydro perspective, Ruff explained.

In response to a question, Ruff said IRCs exist for Libby and Hungry Horse; there has been some discussion of developing IRCs for other storage projects, such as Grand Coulee and Dworshak. The IRCs for these projects would need to be hydrologically, rather than biologically, based, because the information needed to develop biologically-based IRCs for Grand Coulee and Dworshak does not exist -- it took 10 years or so to gather the biological information used in the development of the Libby and Hungry Horse IRCs, he explained.

VI. "Y2K" BiOp Measures Map.

Brown explained that this agenda item is intended to draw attention to the fact that NMFS will be writing a new Biological Opinion. We will be reinitiating consultation this fall, and the goal is to have a new BiOp in place by next March, he said. That Biological Opinion is going to have to address much more than just the 1999 decision on dam removal, said Brown – there are also questions of passage facility development and improvement that are currently being worked through the FFDRWG and SCT processes.

We have a system in place to handle those facility questions, Brown continued; however, we do not currently have a system in place to discuss the operational questions the BiOp will need to

address. At a recent meeting of the Regional Forum chairs, we discussed this issue, in particular, whether the TMT might be an appropriate forum in which to examine not only real-time management decisions, but longer-term operational questions such as 24-hour spill, additional water, IRC implementation and Idaho's concerns about Dworshak operations. The answer that came through fairly clearly is that the TMT probably is not that forum, Brown said; it really isn't set up to address those kinds of questions.

Another possible venue for addressing these operational issues is the Framework IRC work group, Brown said; we could also set up a new group to deal with these questions. The group spent a few minutes discussing this issue; ultimately, Brown asked the IT to think about the question of whether an existing group, or some newly-constituted body, would be the most appropriate forum for the discussion of BiOp operational issues.

Moving on, Brown said the same sorts of questions apply to the institutional aspects of the "Y2K BO." Palensky noted that the 1995 BiOp included a framework that led to the formation of the Regional Forum process; the new Biological Opinion presents an opportunity to reconsider that structure. There is some question about whether the Executive Committee is still a viable entity, he said; there are also questions about tribal participation in the Regional Forum process, and the link between this process and the Columbia River Basin Forum.

Brown said he would be willing to invite any interested IT participants to consider the current IT guidelines, and to assist in designing the institutional piece of the new BiOp. To the extent that there are things in this process that are working, let's continue those, and let's work on other aspects of the Regional Forum process that aren't working so well, he said.

After a few minutes of discussion, Silverberg suggested that the IT participants consider these questions, and come to the next meeting prepared to discuss the aspects of the Regional Forum process that are and are not working, as well as whether or not they would be willing to participate in the work group Brown has described. Brown said that, between now and the next IT meeting, NMFS will do some additional work to answer the question of what is needed in the operational and institutional sections of the new Biological Opinion, and to lay out some of the background information on the current process. We can then use that to stimulate discussion at our July meeting, he said.

VII. 1999 Supplemental FCRPS Biological Opinion.

As most of you are aware, said Brown, six species were added to the Endangered Species List last March. The Corps and other action agencies have told NMFS that their intent is to continue to use the current operating plan, under the 1995 and 1998 Biological Opinions, and have essentially asked NMFS whether or not that is the right thing to do. Given the fact that NMFS is in the process of developing a Biological Assessment to reinitiate consultation on the FCRPS, said Brown, our initial thinking was that we should simply answer the operators' question in the affirmative and move on. Bob Heinith has laid out some tribal concerns with this suggested approach, Brown said, and it now appears that it may not be as simple as I anticipated. Mainly, I wanted to give people a heads-up that we have another question that we need to deal with in a relatively short time-frame – what, if anything, we should change in response to these new species listings. He asked that anyone with specific concerns about the effects of the current operation on the newly-listed species to communicate them to him as soon as possible.

VIII. 427 KAF Documentation.

Brown explained that the Idaho Legislature has asked NMFS to provide some documentation of the biological benefits of, and the continued need for, the 427 KAF in Idaho flow augmentation water, given the fact that the legislation authorizing the release of the 427 KAF is set to expire in December.

NMFS' Paul Wagner reported that a flow augmentation work group has been formed and is working on this task; the group has produced a draft report, but it is still undergoing internal review, and is not yet ready for presentation to the IT. Wagner said it is his hope that this report will be ready for presentation at the IT's July meeting.

There are a number of questions connected to this issue, from Idaho's perspective, said Yost: is it more beneficial for Idaho to provide the 427 KAF than it would be to scare away 6,000 terns? Is it more beneficial for Idaho to provide the 427 KAF than it would be to stop the harvest of 150 adult fall chinook that are already moving up the river? Those are questions that weigh heavily on minds in Idaho as we're trying to decide whether or not to re-authorize the release of the 427 KAF, he said – are there actions that might be both more effective biologically and less-disruptive economically?

So your report will address both whether or not the 427 KAF flow augmentation program is doable, and what biological benefits it provides? Silverberg asked. That's correct, Wagner replied.

IX. Approval of Minutes from April 8 IT Meeting, Next IT Meeting Date and Agenda Items.

The next meeting of the Implementation Team was set for Thursday, July 8, from 9 a.m. to 4 p.m. at NMFS' Portland offices. Meeting notes prepared by Jeff Kuechle, BPA contractor.